

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

Claims 1 and 2 (Canceled).

3. (Previously Presented) The method of Claim 29, wherein administration is achieved through any one or more of intravenous (IV), intramuscular (IM), subcutaneous (SC), intraperitoneal (IP), intrathecal or topical administration.

4. (Previously Presented) The method of Claim 29, wherein administration is subcutaneous, intraperitoneal, intrathecal or topical.

5. (Previously Presented) The method of Claim 29, wherein administration is either intravenous or intramuscular.

Claims 6 and 7 (Canceled).

8. (Previously Presented) The method of Claim 29, wherein the β -lactam is selected from the group consisting of a penicillin, a cephalosporin and a carbapenem.

9. (Previously Presented) The method of Claim 29, wherein the β -lactam is a penicillin.

10. (Previously Presented) The method of Claim 29, wherein the staphylococcal infection is mediated by at least one *S. aureus* microorganism.

11. (Previously Presented) The method of Claim 29, wherein the staphylococcal infection is mediated by at least one coagulase-negative staphylococcal microorganism.

Claims 12-24 (Canceled).

25. (Previously Presented) The method of Claim 29, wherein the anti-staphylococcal agent is one whose activity is mediated by cleavage of the cell wall of staphylococci.

26. (Amended) The method of Claim 29, wherein the anti-staphylococcal agent is ~~selected from the group consisting of~~ lysostaphin, ~~lasA~~ protease and achromopeptidase.

27. (Previously Presented) The method of Claim 29, wherein the staphylococcal infection comprises a coagulase-negative staphylococcal microorganism, a coagulase-positive staphylococcal microorganism or combinations thereof.

28. (Withdrawn) The method of Claim 35, wherein the staphylococcal infection comprises a coagulase-negative staphylococcal microorganism, a coagulase-positive staphylococcal microorganism or combinations thereof.

29. (Previously Presented) A method of treating a staphylococcal infection in a human subject comprising:

administering an anti-staphylococcal agent other than a cell-wall active antibiotic in an amount of from 15-150 mg/kg body weight/day to the human subject; and

administering a β -lactam antibiotic in an amount of from 50-250 mg/kg body weight/day to the human subject;

wherein the anti-staphylococcal agent and the β -lactam antibiotic are administered simultaneously.

30. (Previously Presented) The method of Claim 29, wherein the β -lactam antibiotic is administered in an amount of from 100-200 mg/kg body weight/day to the human subject.

31. (Previously Presented) The method of Claim 29, wherein the anti-staphylococcal agent is administered in an amount of from 25-100 mg/kg body weight/day to the human subject.

32. (Previously Presented) The method of Claim 29, wherein the anti-staphylococcal agent and the β -lactam antibiotic are administered for a period of time sufficient to eradicate said infection.

33. (Previously Presented) The method of Claim 29, wherein the anti-staphylococcal agent and the β -lactam antibiotic are administered for a period of 7 to 28 days.

34. (Previously Presented) The method of Claim 29, wherein the anti-staphylococcal agent and the β -lactam antibiotic are administered for a period of 7 to 21 days.

35. (Withdrawn) A method of treating a staphylococcal infection in a human subject comprising:

administering an anti-staphylococcal agent other than a cell-wall active antibiotic in an amount of from 15-150 mg/kg body weight/day to the human subject; and

administering a glycopeptide antibiotic in an amount of from 10-75 mg/kg body weight/day to the human subject;

wherein the anti-staphylococcal agent and the glycopeptide antibiotic are administered simultaneously.

36. (Withdrawn) The method of Claim 35, wherein the glycopeptide antibiotic is administered in an amount of from 15-50 mg/kg body weight/day to the human subject.

37. (Withdrawn) The method of Claim 35, wherein the anti-staphylococcal agent is administered in an amount of from 25-100 mg/kg body weight/day to the human subject.

38. (Withdrawn) The method of Claim 35, wherein the anti-staphylococcal agent and the glycopeptide antibiotic are administered for a period of time sufficient to eradicate said infection.

39. (Withdrawn) The method of Claim 35, wherein the anti-staphylococcal agent and the glycopeptide antibiotic are administered for a period of 7 to 28 days.

40. (Withdrawn) The method of Claim 35, wherein the anti-staphylococcal agent and the glycopeptide antibiotic are administered for a period of 7 to 21 days.

41. (Withdrawn) The method of Claim 35, wherein the staphylococcal infection is mediated by at least one *S. aureus* microorganism.

42. (Withdrawn) The method of Claim 35, wherein the staphylococcal infection is mediated by at least one coagulase-negative staphylococcal microorganism.

43. (Withdrawn) The method of Claim 35, wherein the anti-staphylococcal agent is one whose activity is mediated by cleavage of the cell wall of staphylococci.

44. (Withdrawn) The method of Claim 35, wherein the anti-staphylococcal agent is selected from the group consisting of lysostaphin, *lasA* protease and achromopeptidase.

45. (Withdrawn) The method of Claim 35, wherein administration is achieved through any one or more of intravenous (IV), intramuscular (IM), subcutaneous (SC), intraperitoneal (IP), intrathecal or topical administration.

46. (Withdrawn) The method of Claim 35, wherein administration is subcutaneous, intraperitoneal, intrathecal or topical.

47. (Withdrawn) The method of Claim 35, wherein administration is either intravenous or intramuscular.

48. (Withdrawn) The method of Claim 35, wherein the amount of anti-staphylococcal agent administered is an amount effective in treating, in a human, a staphylococcal infection that is not lysostaphin-resistant and wherein the amount of the glycopeptide antibiotic administered is an amount effective in treating, in a human, a staphylococcal infection that is not resistant to the glycopeptide antibiotic.

49. (Previously Presented) The method of Claim 29, wherein the amount of anti-staphylococcal agent administered is an amount effective in treating, in a human, a staphylococcal infection that is not lysostaphin-resistant and wherein the amount of the β -lactam antibiotic administered is an amount effective in treating, in a human, a staphylococcal infection that is not resistant to the β -lactam antibiotic.

50. (New) The method of Claim 29, wherein the anti-staphylococcal agent is *lasA* protease.

51. (New) The method of Claim 29, wherein the anti-staphylococcal agent is achromopeptidase.

52. (New) A method of treating a staphylococcal infection in a human subject comprising:

administering an anti-staphylococcal agent other than a cell-wall active antibiotic in an amount of from 2-150 mg/kg body weight/day to the human subject; and

administering a β -lactam antibiotic in an amount of from 50-250 mg/kg body weight/day to the human subject;

wherein the anti-staphylococcal agent and the β -lactam antibiotic are administered simultaneously.

53. (New) The method of Claim 52, wherein the anti-staphylococcal agent is administered in an amount of from 2-100 mg/kg body weight/day.

54. (New) The method of Claim 52, wherein the β -lactam antibiotic is administered in an amount of from 100-200 mg/kg body weight/day to the human subject.

55. (New) The method of Claim 52, wherein the anti-staphylococcal agent and the β -lactam antibiotic are administered for a period of time sufficient to eradicate said infection.

56. (New) The method of Claim 52, wherein the anti-staphylococcal agent and the β -lactam antibiotic are administered for a period of 7 to 28 days.

57. (New) The method of Claim 52, wherein the anti-staphylococcal agent and the β -lactam antibiotic are administered for a period of 7 to 21 days.

58. (New) The method of Claim 52, wherein the anti-staphylococcal agent is *lasA* protease.

59. (New) The method of Claim 52, wherein the anti-staphylococcal agent is achromopeptidase.

60. (New) The method of Claim 52, wherein administration is achieved through any one or more of intravenous (IV), intramuscular (IM), subcutaneous (SC), intraperitoneal (IP), intrathecal or topical administration.

61. (New) The method of Claim 52, wherein administration is subcutaneous, intraperitoneal, intrathecal or topical.

62. (New) The method of Claim 52, wherein administration is either intravenous or intramuscular.
63. (New) The method of Claim 52, wherein the β -lactam is selected from the group consisting of a penicillin, a cephalosporin and a carbapenem.
64. (New) The method of Claim 52, wherein the β -lactam is a penicillin.
65. (New) The method of Claim 52, wherein the staphylococcal infection is mediated by at least one *S. aureus* microorganism.
66. (New) The method of Claim 52, wherein the staphylococcal infection is mediated by at least one coagulase-negative staphylococcal microorganism.
67. (New) The method of Claim 52, wherein the anti-staphylococcal agent is one whose activity is mediated by cleavage of the cell wall of staphylococci.
68. (New) The method of Claim 52, wherein the anti-staphylococcal agent is lysostaphin.
69. (New) The method of Claim 52, wherein the staphylococcal infection comprises a coagulase-negative staphylococcal microorganism, a coagulase-positive staphylococcal microorganism or combinations thereof.
70. (New) A method of treating a staphylococcal infection in a human subject comprising:
- administering an anti-staphylococcal agent other than a cell-wall active antibiotic in an amount of less than 150 mg/kg body weight/day to the human subject; and
- administering a β -lactam antibiotic in an amount of from 50-250 mg/kg body weight/day to the human subject;

wherein the anti-staphylococcal agent and the β -lactam antibiotic are administered simultaneously.

71. (New) The method of Claim 70, wherein the anti-staphylococcal agent is administered in an amount of less than 100 mg/kg body weight/day.

72. (New) The method of Claim 70, wherein the β -lactam antibiotic is administered in an amount of from 100-200 mg/kg body weight/day to the human subject.

73. (New) The method of Claim 70, wherein the anti-staphylococcal agent and the β -lactam antibiotic are administered for a period of time sufficient to eradicate said infection.

74. (New) The method of Claim 70, wherein the anti-staphylococcal agent and the β -lactam antibiotic are administered for a period of 7 to 28 days.

75. (New) The method of Claim 70, wherein the anti-staphylococcal agent and the β -lactam antibiotic are administered for a period of 7 to 21 days.

76. (New) The method of Claim 70, wherein the anti-staphylococcal agent is *lasA* protease.

77. (New) The method of Claim 70, wherein the anti-staphylococcal agent is achromopeptidase.

78. (New) The method of Claim 70, wherein administration is achieved through any one or more of intravenous (IV), intramuscular (IM), subcutaneous (SC), intraperitoneal (IP), intrathecal or topical administration.

79. (New) The method of Claim 70, wherein administration is subcutaneous, intraperitoneal, intrathecal or topical.

80. (New) The method of Claim 70, wherein administration is either intravenous or intramuscular.
81. (New) The method of Claim 70, wherein the β -lactam is selected from the group consisting of a penicillin, a cephalosporin and a carbapenem.
82. (New) The method of Claim 70, wherein the β -lactam is a penicillin.
83. (New) The method of Claim 70, wherein the staphylococcal infection is mediated by at least one *S. aureus* microorganism.
84. (New) The method of Claim 70, wherein the staphylococcal infection is mediated by at least one coagulase-negative staphylococcal microorganism.
85. (New) The method of Claim 70, wherein the anti-staphylococcal agent is one whose activity is mediated by cleavage of the cell wall of staphylococci.
86. (New) The method of Claim 70, wherein the anti-staphylococcal agent is lysostaphin.
87. (New) The method of Claim 70, wherein the staphylococcal infection comprises a coagulase-negative staphylococcal microorganism, a coagulase-positive staphylococcal microorganism or combinations thereof.